

Amendment to description

DISCLOSURE OF THE INVENTION

The present invention is, therefore, contrived in order to resolve the above problems of the conventional technology, and an object of the present invention is to provide a disk device which is capable of reliably guiding and housing disks into disk housing sections in a small required space.

In order to achieve the abovementioned object, the present invention is a disk device, comprising: a swing arm which is provided with a drive unit for playing a disk and swung to insert the drive unit into a space created by splitting disk housing sections capable of housing a plurality of disks; a drive mechanism for driving the swing arm; a loading arm which is capable of being displaced between a leading position for abutting on a disk moving between a disk insertion position and the disk housing sections and leading the disk to the disk housing section side or the disk insertion position, and a withdrawing position for withdrawing from the disk; and a control member which transmits drive power of the drive mechanism to the swing arm, and is provided with loading arm driving means for driving, in accordance with the position thereof, the loading arm to the leading position or the withdrawing position.

In the present invention described above, the disk, which moves from the disk insertion position, abuts on the loading

arm and changes the direction to the disk housing section side. At this moment, the disk is led by the loading arm, which is displaced to the leading position, to the disk housing section side and thus can be housed reliably in the disk housing section.

Moreover, when playing the disk the loading arm is displaced to the withdrawing position, thus it does not collide with the disk. Furthermore, since the loading arm is driven by the control member for driving the swing arm, the mechanism can be simplified.

In another embodiment, the disk device is provided with a biasing member for biasing the loading arm to the leading position.

In the abovementioned embodiment, since the loading arm is biased to the leading position by the biasing member, the disk is pushed into the disk housing section more strongly or pushed out to the disk insertion position.

In another embodiment, the control member is a single plate provided so as to be able to slidingly move, and the loading arm driving means comprises a plurality of cams provided integrally on the control member.

In the abovementioned embodiment, since driving of the plurality of members can be controlled by the cams formed integrally on the single plate, the number of members can be saved, and the transfer pathway for the drive power can be simplified, thus failures and the like hardly occur in the operation of the disk device.

In another embodiment, the disk device has a regulating arm which is capable of being displaced between a regulating position, which is disposed between the disk housed in the disk housing section and the disk insertion position so as not to contact with the disk, and the withdrawing position for withdrawing from the disk housed in the disk housing section.